

## SEQUENCE LISTING

<110> STEINESS, EVA

<120> GLP-1 AND METHODS FOR TREATING DIABETES

<130> 57738(45487)

<140> 10/517,563

<141> 2004-12-07

<150> PCT/DK03/000463

<151> 2003-07-02

<150> 60/465,613

<151> 2003-04-24

<150> 60/393,917

<151> 2002-07-04

<160> 23

<170> PatentIn Ver. 3.3

<210> 1

<211> 31

<212> PRT

<213> Homo sapiens

<400> 1

His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu	Gly
1				5					10					15	

Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	Arg	Gly
			20					25					30	

<210> 2

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 2

aaccaccca ggcttttgtc a

21

<210> 3

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 3  
cttcctccca cgtccagttg ttc 23

<210> 4  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 4  
aggctctcta cctgggtgtgt ggggagcgt 29

<210> 5  
<211> 44  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 5  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Pro Pro Ser Lys Lys Lys Lys Lys Lys  
35 40

<210> 6  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
GLP-1 variant

<400> 6  
His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
1 5 10 15  
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Lys Lys  
20 25 30  
Lys Lys Lys Lys  
35

<210> 7  
 <211> 42  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 GLP-1 variant

<400> 7  
 Lys Lys Lys Lys Lys Lys His Gly Glu Gly Thr Phe Thr Ser Asp Val  
   1                  5                  10                  15  
 Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu  
                   20                  25                  30  
 Val Lys Gly Arg Lys Lys Lys Lys Lys Lys  
           35                  40

<210> 8  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 GLP-1 variant

<400> 8  
 Lys Lys Lys Lys Lys Lys His Gly Glu Gly Thr Phe Thr Ser Asp Val  
   1                  5                  10                  15  
 Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu  
                   20                  25                  30  
 Val Lys Gly Arg  
           35

<210> 9  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 GLP-1 variant

<220>  
 <221> MOD\_RES  
 <222> (31)  
 <223> Lys(palmitoyl)

<400> 9  
 His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
   1                  5                  10                  15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Lys Lys  
                   20                                  25                                  30

Lys Lys Lys Lys Lys  
                   35

<210> 10  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           GLP-1 variant

<220>  
 <221> MOD\_RES  
 <222> (20)  
 <223> Lys(palmitoyl)

<400> 10  
 His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
       1                                  5                                  10                                  15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Lys Lys  
                   20                                  25                                  30

Lys Lys Lys Lys  
                   35

<210> 11  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           GLP-1 variant

<220>  
 <221> MOD\_RES  
 <222> (28)  
 <223> Lys(palmitoyl)

<400> 11  
 His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
       1                                  5                                  10                                  15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Lys Lys  
                   20                                  25                                  30

Lys Lys Lys Lys  
                   35

<210> 12  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 GLP-1 variant

<400> 12  
 His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
     1                    5                    10                    15  
 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Lys Lys  
                     20                    25                    30  
 Lys Lys Lys Lys Lys Lys  
                     35

<210> 13  
 <211> 40  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 GLP-1 variant

<400> 13  
 His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
     1                    5                    10                    15  
 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Lys Lys  
                     20                    25                    30  
 Lys Lys Lys Lys Lys Lys Lys Lys  
                     35                    40

<210> 14  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 GLP-1 variant

<400> 14  
 His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
     1                    5                    10                    15  
 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly Lys  
                     20                    25                    30  
 Lys Lys Lys Lys Lys  
                     35

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<210> 15
<211> 31
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Synthetic
      GLP-1 variant
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<400> 15  
His Ala Gln Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
1 5 10 15  
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly  
20 25 30

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<210> 16
<211> 31
<212> PRT
<213> Artificial Sequence
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<220>  
<223> Description of Artificial Sequence: Synthetic  
GLP-1 variant

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<220>  
<221> MOD_RES  
<222> (3)  
<223> acetyl-Lys
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<400> 16
His Ala Lys Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
 1          5          10          15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
          20          25          30

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<210> 17
<211> 31
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Synthetic
      GLP-1 variant
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<400> 17
His Ala Glu Gly Thr Phe Thr Ser Asp Thr Ser Lys Tyr Leu Glu Gly
  1             5             10             15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
      20             25             30

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<210> 18  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 GLP-1 variant

<400> 18  
 His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Lys Tyr Leu Glu Gly  
       1                  5                  10                  15  
 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly  
                   20                  25                  30

<210> 19  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 GLP-1 variant

<400> 19  
 His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
       1                  5                  10                  15  
 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly  
                   20                  25                  30

<210> 20  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 GLP-1 variant

<400> 20  
 His Ser Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
       1                  5                  10                  15  
 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly  
                   20                  25                  30

<210> 21  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 21

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
 1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys  
 20 25

&lt;210&gt; 22

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 22

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
 1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly  
 20 25

&lt;210&gt; 23

&lt;211&gt; 30

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 23

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
 1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg  
 20 25 30